Complete Summary

GUIDELINE TITLE

Neurologic assessment of the older adult. A guide for nurses.

BIBLIOGRAPHIC SOURCE(S)

American Association of Neuroscience Nurses. Neurologic assessment of the older adult a guide for nurses. A guide for nurses. Glenview (IL): American Association of Neuroscience Nurses; 2007. 22 p.

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

Neurologic conditions and neurological changes associated with the aging process

GUIDELINE CATEGORY

Counseling Evaluation Risk Assessment Screening

CLINICAL SPECIALTY

Family Practice Geriatrics Internal Medicine Neurology Nursing

INTENDED USERS

Advanced Practice Nurses Hospitals Nurses

GUIDELINE OBJECTIVE(S)

- To assist registered nurses, patient care units, and institutions in providing safe and effective care to older adults with neurologic conditions
- To provide background on the biology of aging in the nervous system and to consider its implications for initial and ongoing neurologic assessment of the older adult, stressing the difference between this assessment and that of the younger adult

TARGET POPULATION

The older adult, defined as 65 years and older

Note: The individual practitioner should note that this age is not absolute because chronological age does not equal biological age.

INTERVENTIONS AND PRACTICES CONSIDERED

Neurologic Assessment

- 1. General approach to neurologic assessment of the older adult
- 2. Global and functional assessment
 - Activities of daily living assessment
 - Sleep assessment
- 3. Mental status assessment
 - Orientation
 - Memory
 - Intellectual performance
 - Thought processes
 - Tools for assessment including Mini-Cog dementia assessment, Mini-Mental State Examination, Controlled Oral Word Association test, and oral Trailmaking Test
- 4. Cranial nerves assessment
- 5. Motor examination
- 6. Reflexes assessment
- 7. Pain assessment (sensory response)
- 8. Consideration of issues that may affect the neurologic exam in the older adult
 - Environment
 - Opioids
 - Fluid and electrolyte balance
 - Infection
 - Fatique
 - Pain

- 9. Patient and family education
- 10. Documentation

MAJOR OUTCOMES CONSIDERED

- Prevalence of neurologic diseases
- Functional status
- Mental status
- Disability
- Sensitivity and specificity of assessment tools

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Secondary Sources) Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A review of the published literature from January 1982 to November 2006 was conducted using Medline/PubMed, CINAHL, and BIOSIS and the following search terms: older adult, geriatric, elder, senior, assessment, test, motor, cognition, sensation, pain, cranial nerve, nervous system, and neurological. Monographs, textbooks, and review articles were also consulted. Studies not directly pertaining to neurologic assessment or not written in English were excluded from further evaluation. Selected articles fulfilled the following criterion: older adult was defined as a person ≥65 years.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus
Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Data Quality Classification

Class I: Randomized controlled trial without significant limitations or metaanalysis

Class II: Randomized controlled trial with important limitations (e.g., methodological flaws, inconsistent results); observational study (e.g., cohort, case control)

Class III: Qualitative study, case study, or series

Class IV: Evidence from reports of expert committees and/or expert opinion of the guideline panel, standards of care, and clinical protocols that have been identified

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Clinical Practice Guidelines and recommendations for practice are developed by evaluating available evidence.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Levels of Recommendation

- **Level 1**: Recommendations are supported by class I evidence.
- **Level 2**: Recommendations are supported by class II evidence.
- **Level 3**: Recommendations are supported by class III and class IV evidence.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Blinded external peer review was performed using established criteria for evaluation.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The data quality classifications (**I-IV**) supporting the recommendations and levels of recommendation (**1-3**) are defined at the end of the "Major Recommendations" field.

Neurologic Assessment

General Approach

Because of decreased processing speed in older adults, nurses should use a calm, ordered approach and allow adequate time for patients to respond to questions and verbal instructions (**Level 3**; Whitney, Pugh, & Mortimer, 2004).

If a patient uses an adaptive device (e.g., hearing aid, glasses, mobility aid), the nurse should ensure the use of the device during assessment if it is available; document if the device is not available or is not functioning (**Level 3**; Pepper, 2006).

Nurses should provide a quiet, nondistracting environment and pace tasks according to the patient's endurance (**Level 3**; Degler, 2004).

Assessment of the patient may include family members or other identified sources of support, who may provide additional information or be involved in planning care (**Level 3**; Degler, 2004).

Global and Functional Assessment

Activities of daily living or instrumental activities of daily living; see Figures 2, 3 in the original guideline document (**Level 3**; Lawton & Brody, 1969; National Institutes of Health, 1987). It may be helpful to remember the following mnemonics: DEATH (dressing, eating, ambulation, toileting, habitus) and SHAFT (shopping, housekeeping, able to use phone, food preparation/ finances, transportation).

Screen for sleep assessment by asking the older adult the following questions:

- Are you satisfied with your sleep?
- Does sleep or fatigue interfere with your activities?
- Does your bed partner or another person notice unusual behavior (e.g., snoring, interrupted breathing, leg movements) in you during sleep? (Level 3; National Institutes of Health, 1990)

Mental Status

Orientation (Level 3; Hobdell et al., 2004; Larner, 2006)

Memory (Level 2; Craik, Byrd, & Swanson, 1987; Hobdell et al., 2004; Larner, 2006; Salthouse, 2005; Timiras, 2003)

Intellectual Performance (**Level 2**; Compton et al., 2000; Hobdell et al., 2004; Larner, 2006; Wechler, 1981)

Thought Process

- Judgment and problem solving (Level 3; Botwinick, 1975; Drachman, Long, & Swearer, 1994; Horn, 1975)
- Abstract versus concrete thinking (Level 3; Hobdell et al., 2004; LaRue, 1992; Wecker et al., 2000)
- Affect and mood
 - 1. Screen for depressive symptoms with the following questions:
 - "During the last month have you been bothered by feeling sad, depressed, or hopeless?"
 - "During the last month have you often had little interest or pleasure in doing things?"

These questions have 96% sensitivity for detecting major depression and indicate the need for follow-up with a more comprehensive interview (**Level 2**; Johnston, Covinsky, & Landefeld, 2005; Steffens et al., 2000).

- 2. Personality traits may become more pronounced or exaggerated with age (Victor & Ropper, 2001).
- Attention (Level 2; Carlson et al., 1995; Earles, Smith, & Park, 1996; McDowd & Shaw, 2000)
- Executive function (**Level 2**; Raz et al., 1998; Salthouse, 2005)
 - 2. Previously undetected dementia may often be first assessed in patients when they are in settings unfamiliar to them, such as the hospital (Kennedy, 2004).
 - 3. Patients with dementia may also experience delirium (Foreman et al., 2003), and it is important to distinguish the various signs and symptoms of dementia, delirium, and depression (for a comparison of the clinical features of delirium, dementia, and depression, go to http://virtualmentor.ama-assn.org/2008/06/cprl1-0806.html) (Table 1 in the original guideline document).
 - After delirium has been ruled out or treated, best practices for the assessment of executive function in older adults include use of the controlled oral word association test and the oral version of the trailmaking test (**Level 3**; Kennedy, 2004).
 - 5. Communication (**Level 3**; Hobdell et al., 2004)
 - Speech patterns
 - Reading and writing
 - 5. Sensory recognition (**Level 3**; Hobdell et al., 2004; Sirven & Mancall, 2002)
 - 6. Delirium is a perceptual disturbance that develops during a short period of time and tends to fluctuate over time. It is also characterized by an alteration in consciousness, reduced attention, and a change in cognition (American Psychiatric Association, 2000). The incidence in

hospitalized older adults is around 20% but may be as high as 60% at discharge and is associated with significantly increased morbidity and mortality (Foreman et al., 2003). It is often unrecognized by healthcare providers; therefore systematic assessment for delirium in high-risk older adults is an important component of care (**Level 2**; Ely, Siegel, & Inouye, 2001; Ely et al., 2001; McNicoll et al., 2005; Truman & Ely, 2003).

Tools

- Other tools to assess areas not specified here (e.g., orientation and intellectual performance such as calculation) are the same as those used with younger adults.
- Depression
 - 1. See above, under "Affect and mood," for screen.
 - Several full-length scales have been validated for use in older adults to measure for depression. The Geriatric Depression Scale (Yesavage et al., 1983) has been used widely in community, acute, and long-term care settings.
- The Mini-Cog™ is a dementia assessment tool that can be given quickly, requires only paper and pencil or pen, and combines the clock-drawing test (CDT) as a distracter with an uncued 3-item recall test. It is relatively uninfluenced by level of education or language of origin. The test is administered as follows:
 - 1. Make sure that you have the patient's attention. Instruct the patient to listen carefully to and remember three unrelated words and then to repeat the words back to you (to be sure the patient heard them).
 - 2. Instruct the patient to draw the face of a clock on either a blank sheet of paper or a sheet on which the clock circle has already been drawn. After the patient puts the numbers on the clock face, ask him or her to draw the hands of the clock to read a specific time (11:10 and 8:20 are most commonly used and are more sensitive than some others). These instructions can be repeated, but no additional instructions should be given. If the patient cannot complete the CDT in =3 minutes, move on to the next step.
 - 3. Ask the patient to repeat the three previously presented words. Give 1 point for each recalled word after the CDT distracter for a total of 3 possible points for recall (range 0-3). Give 2 points for a normal CDT and 0 points for an abnormal CDT. The CDT is considered normal if all numbers are depicted in the correct sequence and position and if the hands readably display the requested time. The recall and CDT scores are added to get the Mini-Cog score. A score of 0-2 indicates a positive screen for dementia (Borson et al., 2000; Borson et al., 2003; Borson et al., 2006). See Appendix Mini-Cog™ in the original guideline document.
- The Mini-Mental State Examination (MMSE) is a widely used and validated 30-item tool to measure cognitive status in adults. Normal function is considered to be a score of >24 out of 30. It can be used both as a screening tool and as a tool for following a patient over time. It has been well validated and is translated into a number of languages (Folstein, Folstein, & McHugh, 1975).

- The Controlled Oral Word Association Test (Spreen & Benton, 1977) is a measure of executive function and reflects frontal lobe functioning, including abstract thinking, problem solving, ability to sequence, and ability to resist distraction, intrusion, and perseveration. The tester cues the patient to begin with the letter *F*, then *A*, then *S* and provide words of 3 or more letters beginning with that letter. Patients should be able to list 10 words in each category within 1 minute.
- The oral Trailmaking Test (Ricker & Axelrod, 1994) has the patient pair letters and numbers sequentially until the 13th digit is reached: 1-A, 2-B, and so on. More than two pairing errors is considered impairment.
- Delirium assessment
 - For verbal, nonintubated patients, regardless of setting, use the standard Confusion Assessment Method (Level 2; Inouye et al., 1990; McNicoll et al., 2005).
 - For intubated or nonverbal patients in the intensive care unit (ICU), use the Confusion Assessment Method—Intensive Care Unit (CAM-ICU) for assessment of delirium (Level 2; Ely et al., 2001; McNicoll et al., 2005). Both instruments, when used serially, have good reliability and validity or detecting delirium in older adults.
 - 3. The NEECHAM confusion scale has also showed high sensitivity and specificity for recognition of delirium both for general hospitalized patients (Neelon et al., 1996) and for ICU patients (Immers, Schuurmans, & van de Bijl, 2005). Benefits of the NEECHAM scale are low patient burden and ease of use in nonintubated patients.

Cranial Nerves

Assess all CN I-XII (Level 2; Hobdell et al., 2004; Larner, 2006).

Tools

- The Snellen chart and Jaeger card are the most sensitive and specific methods for visual screening (Johnston et al., 2005). The Rosenbaum visual card has also been validated against the Snellen chart assessing near vision; however, it is important to ensure that the card used in the assessment has been properly scaled because many versions are inaccurate and have led to discrepancies in acuity measurements (Horton & Jones, 1997).
- The Whisper Test assesses sensitivities and specificities between 70% and 100% (Johnston et al., 2005). Refer to audiometry if functional impairment either is noncorrected or remains with correction following cerumen check.

Motor Examination

Muscle Size, Strength, and Tone (**Level 3**; Hobdell et al., 2004; Larner, 2006; Timiras, 2003)

- Coordination (**Level 3**; Hobdell et al., 2004; Larner, 2006)
 - 1. Rapid alternating movements
 - 2. Heel-to-shin test
 - 3. Romberg Test
 - 4. Gait

- Tool: Get Up and Go Test (Level 2; Gunter et al., 2000; Mathias, Nayak, & Isaacs, 1986; Podsiadlo & Richardson, 1991; Vassallo et al., 2004)
 - 1. Start from sitting in chair, get up, walk 10 feet, turn around, walk back. This test should be performed rapidly and smoothly.
 - 2. If completion of the test takes >20 seconds, this result is usually associated with another functional impairment and an increased risk of fall (University of Iowa Gerontological Nursing Interventions Research Center [UIGN], 2004).
 - 3. Assess for:
 - Use of hands to stand
 - Stability immediately upon standing up from chair
 - Hesitation on initiation of walking
 - Feet clearing the floor
 - Gait base
 - Truncal control
 - Arm sway
 - Step symmetry, continuity, length, width
 - Use of assistive devices
 - This assessment can provide information regarding neurologic disorders such as Parkinson's disease, normal pressure hydrocephalus, cerebellar disease, and stroke, in addition to risk of falling ("Performance-Oriented Assessment of Mobility," 2005).

Reflexes

Superficial (**Level 3**; Hobdell et al., 2004; Larner, 2006; Sirven & Mancall, 2002): Abdominal reflexes may be diminished or absent (Sirven & Mancall); however, this condition may be associated with other responses (e.g., number of pregnancies, history of abdominal surgery) rather than an aging-related change.

Deep Tendon (**Level 3**; Hobdell et al., 2004; Larner, 2006; Sirven & Mancall, 2002): It is common to see decreased ankle reflexes, but this is due to decreased elasticity in the Achilles tendon rather than change within the nerve or the reflex arc (Sirven & Mancall, 2002).

Primitive or Developmental (**Level 2**; Huff et al., 1987; Jenkyn et al., 1985): Snout, glabellar, and palmomental reflexes may return.

Sensory Response

Pain Assessment: The standard Verbal 0–10 Scale, verbal descriptor scale; simple yes/no (American Geriatrics Society [AGS] Panel on Persistent Pain in Older Persons, 2002; Herr, Decker & Bjoro, 2004; Herr et al., 2006), or the Visual Analog Pain Scale may be used; see Figure 4 in the original guideline document (**Level 2**; Agency for Healthcare Research and Quality, 1992). If patient has difficulty with verbalization or numeric rating, the Faces Pain Scale—Revised may be useful (Hicks et al., 2001); see Figure 5 in the original guideline document. These tools are discussed below (**Level 3**; AGS Panel on Persistent Pain in Older Persons, 2002).

Pain assessment in older adults with severe cognitive impairment or communication difficulty is a particular challenge. Numerous instruments have been developed for assessing these in various populations (e.g., postsurgical patients, Alzheimer's patients) and have been used in limited fashion to date (van Herk et al., 2007).

Superficial Sensations: deep pain, light touch, temperature (**Level 3**; Larner, 2006)

Deep Sensations: proprioception, vibration (**Level 3**; Larner, 2006)

Cortical Discrimination: stereognosis, left-to-right discrimination, graphesthesia, extinction (**Level 3**; Hobdell et al., 2004)

Tools

- The Visual Analog Pain Scale; see Figure 4 in the original guideline document. (Agency for Healthcare Research and Quality, 1992).
- The Faces Pain Scale—Revised; see Figure 5 in the original guideline document (Hicks et al., 2001). This tool was able to be used effectively by 60% of older adults with mild to moderate cognitive impairment (Scherder & Bouma, 2000).
- The Pain Assessment in Advanced Dementia (PAINAD) Scale (Warden, Hurley, & Volicer, 2003) measures 5 items, each rated 0–2: breathing, vocalization, facial expression, body language, and consolability; see Figure 6 in the original guideline document. Although no cutoff score was provided for the PAINAD, lower total scores resulted when analgesia was provided (Lane et al., 2003). A recent review of pain scales for use in older adults with cognitive impairment or communication difficulties recommended that the PAINAD scale was the most feasible scale for clinical practice of all currently available and validated scales (van Herk et al., 2007).
- The Checklist of Nonverbal Pain Indicators (CNPI) is an observational scale scored while the patient is resting and then during activity (Feldt, 2000). The checklist includes five nonverbal behaviors: nonverbal vocalizations, grimacing, bracing, restlessness, and rubbing the affected area. The last behavior is any verbal complaint of pain. Each pain indicator is scored with 1 point if present (maximum score = 6).
- Behavioral Pain Scale (Payen et al, 2001).
- Critical-Care Pain Observation Tool (Gelinas et al., 2005).

Issues That May Affect the Neurologic Exam in the Older Adult

Environment

Because of decreased hearing, vision, and tactile sensation with aging, cues in the environment are an important feedback mechanism for older adults. When an older adult experiences a change in environment, such as a new admission to a hospital or care facility or a transfer from one unit to another, his or her performance on neurologic assessment may be negatively affected. Orienting the patient to the environment and planning for other needs, such as providing adequate lighting without glare, visual and auditory clues, and appropriate

assistive devices, is critical to maximize the patient's functioning within the environment (Spera, 2004).

Opioids

Pharmacokinetics are altered in older adults because of decreased liver and renal function, so opioids may stay in the body longer and increase the risk of nervous system depression. In particular, meperidine should be avoided in older adults because both the active and neurotoxic metabolite, normeperidine, is more likely to accumulate. In addition, drug interactions are more likely because of polypharmacy in older adults (Willens, 2004).

Fluid and Electrolyte Balance

Older adults with fluid and electrolyte imbalances such as dehydration or hypernatremia are at risk for developing changes in their neurologic examination. After these imbalances are corrected, the neurologic examination may improve (Mulvey, 2004).

Infection

Sudden onset of confusion or change in the level of consciousness may be the first sign of an infection in older adults, particularly urinary tract infections, which may also increase risk of falls or present with declines in activities of daily living (Degler, 2004; Harkness, 2006).

Fatigue

Fatigue may occur with increased or sustained activity; increased frequency of assessment may increase motor fatigue. Provide periods of adequate rest for patients as indicated and pace activities. To promote health, encourage regular activity to the degree that the person is able (Degler, 2004).

Pain

Pain may limit range of motion and mobility. To promote flexibility and endurance, encourage regular activity to the degree that the person is able. Pace activities, and medicate for pain per recommendations (Degler, 2004; Willens, 2004).

Education

Resources for Patients and Families

- National Institutes of Health (http://nihseniorhealth.gov/)
- Centers for Disease Control and Prevention, Healthy Aging (www.cdc.gov/aging/info.htm)

Web Sites for Professionals

• The <u>GeroNurseOnline Web site</u>, developed through the Nurse Competence in Aging initiative, is the official geriatric nursing Web site of the American

Nurses Association (ANA) and the John A. Hartford Foundation Institute for Geriatric Nursing at the New York University College of Nursing. The Web site includes links to the "Try This" Web portal offering protocols and tools that may be useful for further assessment of identified problems in the neurologic assessment of older adults, including the Hearing Loss Screener, the Pittsburgh Sleep Quality Index (PSQI), and the Confusion Assessment Method (CAM). The Web site also includes a search function for common problems such as depression, falls, sleep, delirium, and pain.

- The University of Iowa Gerontological Nursing Interventions Research Center (GNIRC) Web site provides access to the GEROnurse listserv.
- The Geriatric Depression Scale, along with a discussion of the tool and links to translations, is available at http://www.stanford.edu/~yesavage/GDS.html.
- The Mini–Mental State Examination Web site (<u>www.minimental.com</u>) offers information on the translation and use of the MMSE.
- Pain in the Elderly (www.cityofhope.org).

Documentation

The initial neurologic assessment of the older adult should be a comprehensive assessment whenever possible. Positive responses by patients to screening questions, such as the depression screen, should be followed up with further assessment, intervention, and referral for treatment to the appropriate provider (e.g., attending physician, primary care provider, advanced practice nurse, psychiatric liaison) as indicated by agency protocol. Documentation of all assessment findings (positive and negative) and any interventions following assessment is important or continuing care. Following the initial assessment of the older adult with a neurologic condition, the assessment should be repeated with frequency and scope (i.e., limited or comprehensive) as indicated by the setting, acuity, and presentation of the patient (**Level 3**; Bickley & Hoekelman, 1999).

Practice Pearls

- Aging is associated with normal changes within the CNS and other systems
 that influence baseline assessment findings in older adults. It is critical that
 the nurse be aware of these normal changes in addition to the patient's
 baseline function in order to assess for changes or pathological findings.
- Because one of the normal changes of aging is slower processing speed, it is important that ample time for response be given to older adults.
- As sleep quality, pain, and depressive symptoms may significantly influence cognitive and overall functioning in older adults, routine assessment and consideration of these factors are important components of the neurologic assessment.
- The registered nurse needs to have an awareness of the clinical issues commonly encountered in older adults that may negatively influence the neurologic exam, including fluid and electrolyte imbalances, opioid analgesia administration, fatigue, environmental changes, pain, infection, and depression. Attention to both the clinical condition of the patient and changes in exam findings (which in some cases may be the first signal of changes in neurologic status) may optimize outcomes.
- In acute care settings older adults are at particularly high risk for the development of delirium; therefore, the neurologic assessment should include

- an ongoing assessment with a standardized delirium assessment tool in order to detect this syndrome early.
- It may be beneficial to include family members or other support people in the assessment process in order to validate or gain information or aid in planning care.

Definitions:

Data Quality Classification

Class I: Randomized controlled trial without significant limitations or metaanalysis

Class II: Randomized controlled trial with important limitations (e.g., methodological flaws, inconsistent results); observational study (e.g., cohort, case control)

Class III: Qualitative study, case study, or series

Class IV: Evidence from reports of expert committees and/or expert opinion of the guideline panel, standards of care, and clinical protocols that have been identified

Levels of Recommendation

- **Level 1**: Recommendations are supported by class I evidence.
- **Level 2**: Recommendations are supported by class II evidence.
- **Level 3**: Recommendations are supported by class III and class IV evidence.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for selected recommendations (see the "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Resources and recommendations for practice should enable nurses to provide an optimal assessment of the older adult in order to inform best practice.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- The author, editors, and publisher of this document neither represent nor guarantee that the practices described herein will, if followed, ensure safe and effective patient care. The authors, editors, and publisher further assume no liability or responsibility in connection with any information or recommendations contained in this document. These recommendations reflect the American Association of Neuroscience Nurses' judgment about the state of general knowledge and practice in their field as of the date of publication and are subject to change on the basis of the availability of new scientific information.
- Adherence to these guidelines is voluntary, and the ultimate determination about their application must be made by the practitioner in light of the circumstances presented by a particular patient. This guide is an essential resource for nurses who are providing care to older adults with a neurologic condition. It is intended not to replace formal learning but to augment the knowledge of clinicians and provide a readily available reference tool.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms

For information about <u>availability</u>, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness Staying Healthy

IOM DOMAIN

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Association of Neuroscience Nurses. Neurologic assessment of the older adult a guide for nurses. A guide for nurses. Glenview (IL): American Association of Neuroscience Nurses; 2007. 22 p.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2007

GUIDELINE DEVELOPER(S)

American Association of Neuroscience Nurses - Professional Association

SOURCE(S) OF FUNDING

American Association of Neuroscience Nurses

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Content Author: Hilaire J. Thompson, PhD, CRNP, BC, CNRN

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The American Association of Neuroscience Nurses (AANN) requires that all planners, teachers, and authors involved in CNE make full disclosure indicating whether the individual and/or his/her family have any **relevant financial relationships**, now or within the 12 months preceding this event, with a commercial interest (e.g. pharmaceutical companies, biomedical device manufacturers, and/or corporations) whose products or services are discussed in the continuing education activity content over which the individual has control. All presenters participating in the AANN sponsored programs must complete this form and return it as indicated. All information disclosed is printed in the program materials.

The authors state no potential conflicts of interest.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the <u>American Association of Neuroscience Nurses</u> <u>Web site</u>.

Print copies: Available from the American Association of Neuroscience Nurses, 4700 W. Lake Ave., Glenview, IL 60025.

AVAILABILITY OF COMPANION DOCUMENTS

Tools for dementia assessment including Appendix Mini- $Cog^{\text{\tiny M}}$ are available in the <u>original guideline document</u>.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on September 8, 2009. The information was verified by the guideline developer on September 29, 2009.

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